Vapor Intrusion and Social Science

The Case of TCE Contamination in Endicott, NY

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Vapor Intrusion
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The Social Zone above the Vadose Zone

Outline

- Personal background

- Dissertation research

- Some emerging themes

- Social science in vapor intrusion debates
  - Why understanding people matters?

Personal Background

- Resident 2000-2003

- Attended first public information sessions in 2002

- Anthropology student

- Returning resident, pursuing a PhD in Anthropology

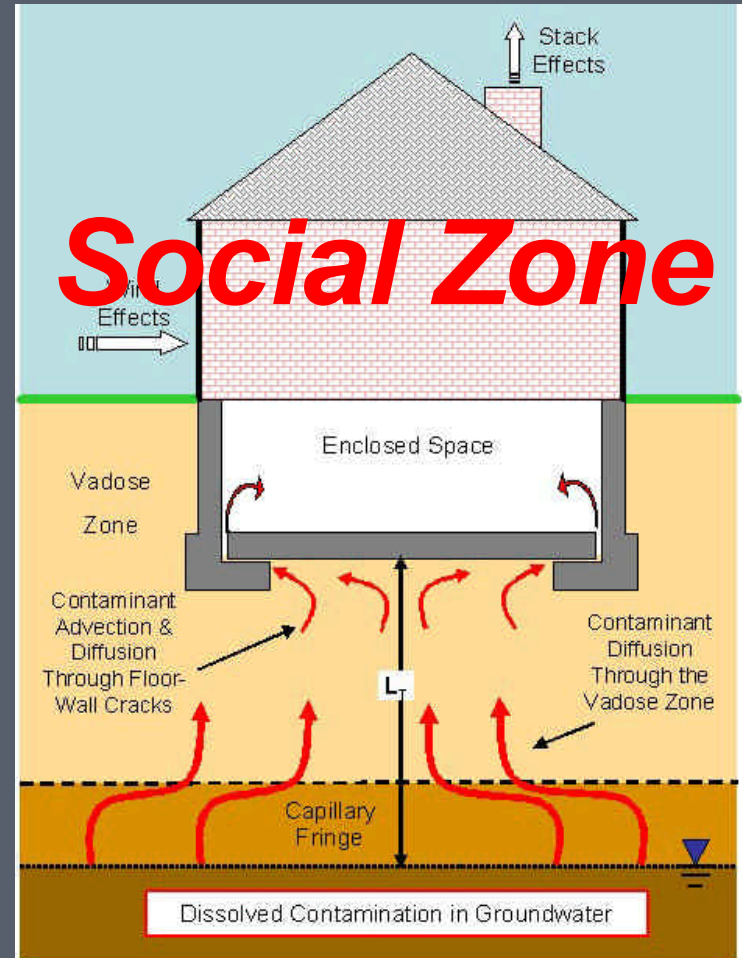Former IBM Plant

Dissertation Research

- Applied Anthropology; OSU

- NSF Grant; Decision, Risk, and Management Sciences Program

- Risk, advocacy, and Post-IBM Pollution Conflict

Emerging Research Themes

- 35 interviews with plume residents

- Some Emerging Themes
  - Frustration/Contemplation
  - Health risk/ambiguity
  - Property devaluation
  - Diversity in perspective (age)
  - Deindustrialization→ dissolving community

Multiple Levels of Evidence of Concern and Frustration

- Contesting science/expertise

- Uncertainty (health risk and community's future)

- Critique of industry and government

- Property devaluation

The IBM Spill Archive in the Local Library

"If we start getting anymore documents on this issue, IBM is going to have to buy us a new wing"– Librarian, George F. Johnson Library

Why Ethnographic Research?

"Even when quantitative data are needed to determine the existence of environmental health effects, qualitative data are necessary to understand how people and communities experience and act on these problems." (Brown 2003)

Social Science in Vapor Intrusion

- How is the social impact of vapor intrusion and TCE contamination understood locally?

- What is the perspective of residents who don't take action or 'go public' with their concerns?

- What causes community frustration and concern, and therefore conflict and distrust or mistrust, among the various VI stakeholders (e.g., regulators, consultants, industry reps, community, etc.)?

Vapor Intrusion Governance

- VI risk governance

- Public Input in VI policy; Pluralism→ integrated decision-making

- Synthesize technical and social sciences
    → VI is multidisciplinary
    → Ethnography is a tool for exploring community
concerns and building   trust between
VI   stakeholders

Thank You